

**Oral Public Comment on the
CASAC Review of EPA's Policy Assessment for the Review of the National Ambient Air Quality
Standards for Particulate Matter (External Review Draft – September 2019)**

**Advice from the
Independent Particulate Matter Review Panel
(formerly the
EPA CASAC Particulate Matter Review Panel)
on EPA's
Policy Assessment
for the Review of the National Ambient Air
Quality Standards for Particulate Matter
(External Review Draft – September 2019)**

**ORAL COMMENT BY:
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**SUBMITTED TO
Clean Air Scientific Advisory Committee
U.S. Environmental Protection Agency
Washington, DC**

DATE

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From 2015 to 2018, CASAC was augmented by the CASAC PM Review Panel. In an unprecedented move, the Panel was arbitrarily and capriciously dismissed on October 10, 2018 by Administrator Wheeler. As a result of numerous recent changes to the CASAC and the scientific review of the air quality standards that undermine the quality, credibility, and integrity of both, many of us decided to continue the public service to which we agreed in 2015. Thus, we formed the nongovernmental Independent Particulate Matter Review Panel. The Panel

submitted comments on the draft PM Integrated Science Assessment (ISA) in December¹ and March.²

Exactly one year after being disbanded, we reconvened for a two-day public meeting in Crystal City to deliberate on the draft policy assessment.³ We approved our consensus letter, and charge question responses, in a public quality review teleconference on Friday. This morning, we submitted our report, along with individual member comments, to the CASAC.⁴ Administrator Wheeler: you'll be getting our letter in the mail.

CASAC, you asked for us on April 11,⁵ but on July 25, Administrator Wheeler again arbitrarily denied you, and gave you instead a smaller pool of

Video and audio of the full October 10-11, 2019 meeting of the Independent Particulate Matter Review Panel is available on YouTube:

Day 1: <https://www.youtube.com/watch?v=wpodC23hJnQ>

Day 2: <https://www.youtube.com/watch?v=Y4LHvEAllrk>

More details of the meeting, which was hosted by the Union of Concerned Scientists, are at <http://www.ucsusa.org/pmpanel>.

IPMRP members were subject to a good faith ethics review by the former director of the EPA Science Advisory Board Staff Office. The IPRMP meeting was conducted according to the same procedures as a CASAC meeting. Panelists were reimbursed by the Union of Concerned Scientists for travel to attend the October 10-11, 2019 meeting but did not accept honoraria or other compensation. The content of the meetings, this letter, and attachments were determined exclusively by the Panel, and reflect exclusively the Panel's deliberations.

The [Panel's report](#)⁴ is available at the EPA CASAC website and has been submitted to Docket ID No. EPA-HQ-OAR-2015-0072.

¹ Frey, H.C., A.V. Diez Roux, J. Balmes, J.C. Chow, D.W. Dockery, J.R. Harkema, J. Kaufman, D.M. Kenski, M. Kleinman, R.L. Poirot, J.A. Sarnat, E.A. Sheppard, B. Turpin, and S. Vedal, "CASAC Review of EPA's Integrated Science Assessment (ISA) for Particulate Matter (External Review Draft – October 2018)," 34 page letter and 100 pages of attachments submitted to Chair, Clean Air Scientific Advisory Committee, U.S. Environmental Protection Agency and to Docket EPA-HQ-ORD-2014-0859, December 10, 2018.

[https://yosemite.epa.gov/sab/sabproduct.nsf/086D8B853E0B63AE8525835F004DC679/\\$File/PMRP+Letter+to+CASAC+181210+Final+181210.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/086D8B853E0B63AE8525835F004DC679/$File/PMRP+Letter+to+CASAC+181210+Final+181210.pdf)

² Frey, H.C., A.V. Diez Roux, P. Adams, G. Allen, J. Balmes, J.C. Chow, D.W. Dockery, J.R. Harkema, J. Kaufman, D.M. Kenski, M. Kleinman, R. McConnell, R.L. Poirot, J.A. Sarnat, E.A. Sheppard, B. Turpin, and S. Vedal, "03-07-19 Draft CASAC Review of EPA's Integrated Science Assessment (ISA) for Particulate Matter (External Review Draft – October 2018)," 19 page letter submitted to Chair, Clean Air Scientific Advisory Committee, U.S. Environmental Protection Agency, Washington, DC, March 27, 2019.

[https://yosemite.epa.gov/sab/sabproduct.nsf/A491FD482BB83BEE852583CA006A2548/\\$File/Written+Comments+from+17+Members+of+the+CASAC+PM+Review+Panel+that+was+Disbanded+on+October+11+2018+rev.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/A491FD482BB83BEE852583CA006A2548/$File/Written+Comments+from+17+Members+of+the+CASAC+PM+Review+Panel+that+was+Disbanded+on+October+11+2018+rev.pdf)

³ <https://www.ucsusa.org/meeting-independent-particulate-matter-review-panel>. See also videos of the meeting for [Day 1](#) and [Day 2](#).

⁴ Frey, H.C., P. Adams, J.L. Adgate, G. Allen, J. Balmes, K. Boyle, J.C. Chow, D.W. Dockery, H. Felton, T. Gordon, J.R. Harkema, J. Kaufman, P. Kinney, M. Kleinman, R. McConnell, R.L. Poirot, J.A. Sarnat, E.A. Sheppard, B. Turpin, and R. Wyzga, "Advice from the Independent Particulate Matter Review Panel (formerly EPA CASAC Particulate Matter Review Panel) on EPA's Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter (External Review Draft – September 2019)," 11 page letter and 192 pages of attachments submitted to Hon. Andrew Wheeler, Administrator, Docket ID No. EPA-HQ-OAR-2015-0072, and Clean Air Scientific Advisory Committee, U.S. Environmental Protection Agency, Washington, DC, October 22, 2019.

[https://yosemite.epa.gov/sab/sabproduct.nsf/81DF85B5460CC14F8525849B0043144B/\\$File/Independent+Particulate+Matter+Review+Panel+Letter+on+Draft+PA.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/81DF85B5460CC14F8525849B0043144B/$File/Independent+Particulate+Matter+Review+Panel+Letter+on+Draft+PA.pdf)

⁵ Cox, L.A. (2019), "CASAC Review of the EPA's Integrated Science Assessment for Particulate Matter (External Review Draft – October 2018)," EPA-CASAC-19-002, Letter to A. Wheeler, Clean Air Scientific Advisory Committee, U.S. Environmental Protection Agency, Washington, DC, April 11, 2019.

consultants, not focused on PM, who have not reviewed the ISA, and who can only interact with you in writing.⁶ That's, yet again, unprecedented and does not correct the deficiencies of disbanding our panel. So, we're back.

Compared to the CASAC, the twenty-strong panel has more experts, covers more scientific disciplines, and has multiple experts who provide diversity of perspectives in key disciplines, such as epidemiology, toxicology, and controlled human studies, among others. In April, you admitted you lack the needed qualifications to do this review. If I were you, I'd write a one sentence letter to the Administrator stating that this work cannot be done by CASAC without being properly augmented with the PM review panel.

Here's the work we did for you. By the way, we did it faster than you, exposing as nonsensical the Administrator's talking point that disbanding the panel was needed to "streamline" the review process.

Based on scientific evidence, as detailed in our letter and consensus responses to charge questions, the Panel finds that the current suite of primary fine particle annual and 24-hour standards are not protective of public health. The annual standard should be revised to a range of 10 to 8 $\mu\text{g}/\text{m}^3$. The 24-hour standard should be revised to a range of 30 to 25 $\mu\text{g}/\text{m}^3$. These scientific findings are based on consistent epidemiological evidence from multiple multi-city studies, augmented with evidence from single-city studies, at ambient concentrations at and below the levels of the current standards, and are supported by research from experimental models in animals and humans and by accountability studies.

The weight of evidence framework for causality determination is an appropriate and well-vetted tool for drawing causal conclusions. The epidemiologic evidence, including a few accountability studies, and supported by evidence from controlled human studies and toxicological studies, supports the 'causal' and 'likely to be causal' determinations that are the focus of the draft PA for the evidence- and risk-based approaches.

Arguments offered in the draft PA for retaining the current primary fine particle standards are not scientifically justified and are specious.

The level of the coarse PM standard should be revised downward to at least maintain, if not increase, the current level of public health protection to coarse particles.

The annual secondary standard should be revised to a level at least equal to that of the revised primary annual fine particle standard. The current 24-hour secondary standard is not adequate to protect against visibility effects.

A second draft of the ISA should be reviewed by CASAC and the public, and the ISA should be finalized, prior to release of a second external review draft of the PA. The CASAC PM Review Panel should be reappointed to provide CASAC with the expertise it needs.

[https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebReportsLastMonthCASAC/6CBCBBC3025E13B4852583D90047B352/\\$File/EPA-CASAC-19-002+.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebReportsLastMonthCASAC/6CBCBBC3025E13B4852583D90047B352/$File/EPA-CASAC-19-002+.pdf)

⁶ Wheeler, A.R. (2019), Letter to L.A. Cox, EPA Clean Air Scientific Advisory Committee, from Administrator, U.S. Environmental Protection Agency, Washington, DC, July 25, 2019, [https://yosemite.epa.gov/sab/sabproduct.nsf/0/6CBCBBC3025E13B4852583D90047B352/\\$File/EPA-CASAC-19-002_Response.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/0/6CBCBBC3025E13B4852583D90047B352/$File/EPA-CASAC-19-002_Response.pdf)